

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

IN THE CLAIMS:

Please amend claims 2, 6-9, 19, and 21 as follows:

B-1
fig. 12E
Sub E11
p. 5

2. (Amended) A semiconductor device comprising:
a substrate having a front surface and a rear surface;
an aluminum nitride insulating film containing therein at least one of
[boron, silicon,] carbon, and oxygen provided under said rear surface of the
substrate; and
a transistor provided over said front surface of the substrate, said
transistor having at least a channel formation region comprising crystalline silicon,
a gate insulating film adjacent to said channel formation region, and a gate electrode
adjacent to said channel formation region with said gate insulating film interposed
therebetween.

B-2
fig. 12E
Sub E21

6. (Amended) An active matrix type [liquid crystal] display comprising:
a substrate having a front surface and a rear surface;
an aluminum nitride insulating film containing therein at least one of
[boron, silicon,] carbon, and oxygen provided under said rear surface of the
substrate; and
a transistor provided over said front surface of the substrate, said
transistor having at least a channel formation region comprising crystalline silicon,
a gate insulating film adjacent to said channel formation region, and a gate electrode
adjacent to said channel formation region with said gate insulating film interposed
therebetween.

B-3
fig. 12E
Sub E21

7. (Amended) An active matrix type [liquid crystal] display comprising:
a substrate having a front surface and a rear surface;

Sub E2
an insulating film comprising aluminum nitride provided [on] under said rear surface of the substrate; and

a transistor provided over said front surface of the substrate, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween, wherein said insulating film comprising aluminum nitride has a thermal conductivity of 0.6 W/cm·K or higher.

3
B
cont
8. (Amended) An active matrix type [liquid crystal] display comprising:
a substrate having a front surface and a rear surface;

p. 7, 8
a multi-layer insulating film provided on said [rear] front surface of the substrate and comprising an aluminum nitride layer and a silicon oxide layer, said aluminum nitride layer and said silicon oxide layer being provided adjacent to each other; and

fig. 12E
a transistor provided over said [front surface of the substrate] multi-layer insulating film, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

fig. 12E
11/21/20
9. (Amended) An active matrix type [liquid crystal] display comprising:
a substrate having an insulating film comprising aluminum nitride outside said substrate, and having a transistor ^{on} [inside] said substrate,

wherein said transistor has at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel

formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

Sub E31

19. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein at least one of [boron, silicon,] carbon, and oxygen provided over said front surface of the substrate; and

a transistor provided over said aluminum nitride insulating film, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

Sub E31

21. (Amended) An active matrix type [liquid crystal] display comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein at least one of [boron, silicon,] carbon, and oxygen provided over said front surface of the substrate; and

a transistor provided over said aluminum nitride insulating film, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

Please add new claims 31-42 as follows:

1121st July 1964
--31. The device of claim 2 wherein said aluminum nitride insulating film has a thickness of 5000 Å or less.

Sub E 4
32. The device of claim 3 wherein said aluminum nitride insulating film has a thickness of 5000 Å or less.

33. The display of claim 6 wherein said aluminum nitride insulating film has a thickness of 5000 Å or less.

B
34. The display of claim 7 wherein said insulating film comprising aluminum nitride has a thickness of 5000 Å or less.

35. The display of claim 8 wherein said aluminum nitride layer has a thickness of 5000 Å or less.

36. The display of claim 9 wherein said insulating film comprising aluminum nitride has a thickness of 5000 Å or less.

Sub E 5
37. The device of claim 19 wherein said aluminum nitride insulating film has a thickness of 5000 Å or less.

38. The device of claim 20 wherein said aluminum nitride insulating film has a thickness of 5000 Å or less.

Sub
E51

39. The display of claim 21 wherein said aluminum nitride insulating film has a thickness of 5000 Å or less.

B6
cont

40. The device of claim 22 wherein said aluminum nitride insulating film has a thickness of 5000 Å or less.

41. The device of claim 23 wherein said aluminum nitride insulating film has a thickness of 5000 Å or less.

42. The device of claim 24 wherein said aluminum nitride insulating film has a thickness of 5000 Å or less.--

REMARKS

The Office Action of April 3, 2000 was received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Filed concurrently herewith is a *Request for a One Month Extension of Time* which extends the shortened statutory period of response to August 3, 2000. Accordingly, Applicants respectfully submit that this response is being timely filed.

Claims 2, 3, 6-9, 11, 12, and 15-30 were pending prior to the instant amendment. By this amendment, claims 2, 3, 6-9, 19, and 21 are amended, and new claims 31-42 are added to recite additional features of the present invention to which Applicants are entitled. Consequently, claims 2, 3, 6-9, 11, 12, and 15-42 are currently pending in the instant application.

Addressing the Office Action, claims 8 and 17 are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which is not described in the